

Southwest Biological Science Center Weekly Highlights

November 21, 2005

"Rangeland Soil Quality" presented at the Grand Staircase-Escalante National Monument: USGS Researcher Mark Miller presented a talk entitled "Rangeland Soil Quality" at BLM's Grand Staircase-Escalante National Monument Visitor Center in Kanab, Utah, on November 17th. Miller was invited to speak to visitors and staff as part of the Monument's Brown Bag Lecture Series, which focuses on scientific topics relevant to Monument management. Miller's talk emphasized linkages among soil quality, ecosystem change, and soil-quality indicators useful for monitoring rangeland condition in relation to management objectives. Mark Miller, Kanab, Utah, 435.644.4325.

National Database on River and Stream Restoration presented at Desert Fishes Council: USGS research ecologist, Steven Gloss, will be attending the 37th annual meeting of the Desert Fishes Council to be held in Cuatro Ciénegas, Coahuila, Mexico November 16-20. Gloss will present one paper and one poster based on his participation as a principal investigator on the National River Restoration Science Synthesis (NRRSS) project. The two papers are co-authored by researchers from the University of New Mexico, Duke University, the University of Maryland and the University of Michigan and titled: "Restoring Rivers and Streams: What is Being Done and Where?" and "River Restoration: Is It Making Ecological and Conservation Sense?". This national synthesis effort has resulted in leading river scientists from all over the U.S. compiling the first comprehensive national database on river and stream restoration efforts in the U.S. which has over 37,000 projects with estimated expenditures of over \$1 Billion per year in the past 15 years. Project information is available at <http://nrrss.nbii.gov/>. Steve Gloss, Tuscon, AZ, 520-670-5391.

Results from the 1996 and 2004 Controlled-flood Experiments on the Colorado River in Grand Canyon: An article titled "Comparison of sediment-transport and bar-response results from the 1996 and 2004 controlled-flood experiments on the Colorado River in Grand Canyon" has received USGS approval and is in press as part of the Proceedings of the 8th Federal Interagency Sedimentation Conference to be held April 2-6, 2006 in Reno, Nevada. Authors, David Topping, et al. conclude that "substantial increases in total eddy-sandbar area and volume in the Colorado River in Marble and Grand Canyons are possible only during controlled floods conducted under the sediment-enriched conditions that follow large tributary floods." They advise that "more sand is required to achieve increases in total area and volume of eddy sandbars throughout all of Marble and Grand Canyons" than the million metric tons input from tributaries that triggered the 2004 controlled flood. David Topping & Ted Melis, Flagstaff, AZ, 928.556.7445